

Population Aging: The Most Prominent Global Demographic Trend of the 21st Century

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ABSTRACT:

The inevitable consequences of decreasing fertility rate as well as mortality rates are rapid increase in number of older people. Now, either the developed country or the developing country it has become a problem for everyone. The elderly population faces a lot of social, economic, political and cultural problems. As population aging has become global phenomena, we need to see how it varies across the developed countries, developing countries and least developed countries. What are the adverse effects of population aging in our society? Why is this becoming a global phenomenon? What are the problems of our elder population? There are many aspects linked with population aging, we need to see into each aspect to understand it.

Key Words: Fertility, Economic Growth, Population Aging, Demographic

INTRODUCTION

Demographics

The world population is witnessing a shift to older population. Regardless of developed or developing country it is spreading everywhere. China has the most aged population in world. Because of its one child policy and improved medical facilities, there is a shift towards older people. Then comes India with eight crore elderly. 55 million elderly go to sleep with empty stomach in India. It is just about the population of UK. 30 million are lonely. More than population of Australia. 12 million are blind. 90% of elderly have to continue their work if they have to live [1]. Like India and China, every country is facing the problem of population aging. Demography of elderly shows that it is becoming a global phenomenon.

This table proves that population is aging at every corner of this world. Whether it is more developed, less developed, or least developed? We can see that population aging is low in least developed regions. We see from the table 1 that proportion of elderly population in developed region is maximum. It is because of low fertility and low mortality. As in America, life expectancy for males at 65 in the year 2000 was 15.9 years and 19.0 for females. These figures were 12.6 and 14.4 years respectively for male and female in year 1950 [2]. Increased medical facilities have improved the life expectancy of elderly people in developed countries. Low fertility rate is caused by high living standards. People are getting educated and concept of nuclear families is getting popular. These are causing low fertility rates. People want few children and they are investing more on them. About one-twelfth of parental life time labor

income is invested in human capital investment in Austria, Japan, Slovenia, and Hungary.

These countries have Total Fertility Rate (TFR) near one. These developed countries have very low fertility rate because they prefer to invest more on one child. Because of this reason population aging increases rapidly [3]. On the other hand, in least developed regions people are not literate and the Literacy Rate is low. In Burkina Faso, Niger, Mali, Chad, Benin Literacy Rates are 21.8%, 28.7%, 46.4%, 25.7%, 34.7% respectively [4]. As a consequence of poor literacy these countries have not have the concept of low fertility or nuclear family. We can see from Table 1 that in these countries the proportion of elderly population is low. But, in these countries also there is an increase in proportion of elderly populace. The increase is small but it is there.

Table 2. shows low fertility in Japan which causes population aging to grow rapidly. Table 3. shows that fertility in Chad one of the least developed countries is greater than Japan. This increase shows that people of Japan want one or two children and they invest more on them. In least developed countries like Chad, aging is more a demographic phenomena resulting from high fertility rates and low mortality rates rather than a phenomena resulting from socio-economic development [5]. Gender discrepancy adds more problems to population aging. Gender discrepancy is seen to be a hurdle in path of our growth and development [6]. Population sex ratios of more developed countries and less developed countries differ a lot. This is evident from the Table 4 and Table 5.

Table 1: Number and proportion of population aged 60 years and older, world and regions 1950-2050) [2]

Region	1950	2000	2050
World number of population aged 60 years and older	205,475	605,785	1,963,767
World proportion of population aged 60 years and older	8%	10%	21%
More developed regions number of population aged 60 years and older	95,473	231,442	395,106
More developed regions proportion of population aged 60 years and older	12	19	34
Less developed regions number of population aged 60 years and older	110,003	374,343	1,568,660
Less developed regions proportion of population aged 60 years and older	6	8	19
Least developed regions number of population aged 60 years and older	10,733	32,167	173,222
Least developed regions proportion of population aged 60 years and older	5	5	10

Table 2: Total fertility (children per woman) for Japan

1950-1955	3.00
1955-1960	2.16
1960-1965	1.99
1965-1970	2.02
1970-1975	2.13
1975-1980	1.83
1980-1985	1.75
1985-1990	1.66
1990-1995	1.48
1995-2000	1.37
2000-2005	1.30
2005-2010	1.27
2010-2015	1.27
2015-2020	1.30
2020-2025	1.35
2025-2030	1.40
2030-2035	1.45
2035-2040	1.50
2040-2045	1.55
2045-2050	1.60

Table 3: Total fertility (children per woman) for Chad

1950-1955	6.10
1955-1960	6.20
1960-1965	6.30
1965-1970	6.40
1970-1975	6.60
1975-1980	6.74
1980-1985	6.75
1985-1990	6.70
1990-1995	6.65
1995-2000	6.62
2000-2005	6.54
2005-2010	6.20
2010-2015	5.78
2015-2020	5.32
2020-2025	4.82
2025-2030	4.31
2030-2035	3.83
2035-2040	3.41
2040-2045	3.08
2045-2050	2.83

Table 4: population sex ratio (males per 100 females)
For more developed regions

1950	91.0
1955	91.6
1960	92.1
1965	92.7
1970	93.0
1975	93.3
1980	93.5
1985	93.7
1990	94.1
1995	94.2
2000	94.3
2005	94.3
2010	94.5
2015	94.8
2020	95.1
2025	95.3
2030	95.4
2035	95.6
2040	95.7
2045	96.0
2050	96.3

Table 5: population sex ratio (males per 100 females)
for less developed regions

1950	104.8
1955	104.4
1960	103.7
1965	103.9
1970	103.8
1975	104.0
1980	103.8
1985	103.7
1990	103.7
1995	103.6
2000	103.5
2005	103.4
2010	103.3
2015	103.2
2020	103.0
2025	102.8
2030	102.5
2035	102.2
2040	101.9
2045	101.7
2050	101.4

Table 6: Entrepreneurial Activity in Men with Age [10]

Age For men	New firms number per 100	Nascent firms number per 100	TEA necessity number per 100	TEA opportunity number per 100	TEA all number per 100
18-24	6.1	8.1	1.8	10.8	13.2
25-34	10.3	10.6	6.0	13.3	19.7
35-44	7.0	7.9	4.3	9.8	14.6
45-54	5.3	6.2	4.1	7.1	11.2
55-64	3.3	3.8	2.8	3.7	6.8

All the tables so far suggest that demographic transition is taking place because of population aging and inflicts many questions on how we are going to handle this situation. As far as our present scenarios of elders are concerned they are facing a lot of social and economical problems emerging out of population aging. The problem of social security, problem of being isolated, problem of income, there are a number of problems in front of us. For poor class of people, it is drastic. Even the affluent families are also facing this. People want there life to be full of luxuries and in this race they sometimes ignore their elderly. Developing countries are getting this trend. Sometimes elder people seem to them as a burden. Then follows the problems of scolding, tension. And this leads to nuclear families.

Economic Status of Elderly

In developing countries like India, more than 66% of elderly living in villages depends upon agriculture. As far as work status is concerned, little census data is available [7]. Among those elderly who were once a salaried or getting wages, 79% living in the rural area and 35% in urban areas did not get any benefit after their retirement from their jobs. In India, 40% of

elderly people were working to get their livelihood. In rural areas, 63% of aged has some property as their own. In urban areas, 58% of aged had some property of their own. Around 70% of aged had to depend on others to get their day-to-day maintenance. This situation is worst in case of female. Around 85% to 87% of them had to depend on others for daily maintenance [8]. Similar conditions prevail in most of the countries as in India. Population aging is problem for developed countries also with increasing expectations on the working class [9]. Productivity is another important aspect which is affected by population aging. Now, many people say it is natural that aged people have less productivity. Many people have tried to gather evidence to prove this concept. There are two types of productivity, one is physical and other is mental. Physical productivity decreases as person get elder and our mental productivity increases [9]. So, we can't say explicitly that as people get older their productivity decreases. It depends on what kind of job one is employed in. There is another concept of wage-productivity gap. Productivity decreases with aging but the gap between wage and productivity at higher ages is not found [9]. Young people are more entrepreneurial than older people.

It is evident from the Table 6 that as people get older their entrepreneurial activity decreases. It can be said that population aging can affect the entrepreneurial activity. If less new firms will come up then growth rate of productivity will slow down. The countries of Eastern Europe and Central Asia face the problem of population aging. Due to population aging, they are faced with problem of diminishing work force for their emerging growth and burden of providing needs to their aging population. In these countries between now and 2050, the work force is expected to diminish and the older population will grow. For example in Bulgaria the working class is expected to diminish by half of today. In Muslim Countries the population aging is going to be a prominent issue. In these Countries fertility rate is not under replacement level, so they will not face the problem of diminishing work force but they will face the problem of providing needs to their huge aged population. In Uzbekistan and turkey, aged population is expected to increase three fold by 2050 [11]. So, every country is facing the menace of population aging, either in form of huge aged population or as diminishing working force.

Health issues related to Aging

Health issues are prime concern for policymakers nowadays. There are many factors affecting health of elderly. First thing is that there is a relation between disease outcome and social factors in elderly. Social isolation, social support and loneliness are some of the social variables which affect the outcome of disease in elderly [12]. Impact of population aging on public expenditure shows that health and long term care will account for approximately half of the increase in social expenditures related to age between 2000 and 2050 [13]. Prominent areas of concern are alleviating poverty, relieving social isolation, achieving proper nutrition, establishing contacts, assuring family support, and maintain basic hygiene. These are the key areas where attention is needed to secure good healthy environment to our elderly population. According to the demographics, problems differ in different regions. In America, in the age group 65 or over mortality rate were 52.8 per 1000 population (for men 57.4 per 1000 and 48.4 per 1000 for women) estimated for 1990-1995. Cardiovascular diseases were the leading diagnosed cause of death in aged in year 1994. Others to follow were “other causes”, 23%; malignant neoplasm, 15%; communicable diseases, 6.5%; and external causes, 3.2%. For both sexes rate were almost same. Mainly there are two kinds of diseases one is communicable and another is non-communicable. Elderly are most vulnerable to these diseases [14]. In India, population aged 60 plus was 56.7 million in year 1991. In 1961, it was 26 million. So, India’s aged population has grown rapidly. As far as developing countries are concerned chronic diseases are becoming a menace for them. Developing countries need to improve their health facilities. Chronic diseases are generally associated with developed countries but reality is that they are becoming equally prominent in

developing countries also. If nothing is being done by 2015 chronic diseases will cost \$84 billion to developing countries [15]. As in India, chronic diseases are expected to cause 66.7% of all deaths in 2020 [16]. Chronic diseases are result of industrialization, socio-economic development, changing age structure, urbanization, changing lifestyles [17]. In developed countries like Australia, population aging is giving rise to problems for their present health care system. Chronic diseases in aged population are needed to be addressed. Among the aged population there is a significant growth in chronic diseases. Some common chronic diseases are asthma, mental health, cardiovascular disease, diabetes, cancer. There is a need to implement chronic disease management for the aged population so that economic as well as financial impact of these diseases can be reduced [18]. As far as communicable diseases are concerned, they also account for more deaths in emergencies. Malaria, measles, respiratory infection, diarrhea are some of the infectious diseases. High occurrences of these diseases are promoted by factors promoting transmission of these diseases. There are many effective interventions to diminish the morbidity as well as mortality of these diseases; they are adequate shelter, food, water, sanitation, health awareness [19]. Either developed or developing country, everywhere there is a transition from communicable disease to non communicable disease.

CONCLUSION

The following discussion shows the prominent effect of population aging. There are a lot of issues under population aging which needs to be discussed. For making this world heaven for elderly, we need to solve the problem of health conditions of elderly. There are economic issues associated with this problem which needs to be addressed. As it has become a global phenomena, countries should cooperate each other in addressing the key issues of population aging. There are organizations working in this direction but there is a need to accelerate the process. There is a need to make policies for alleviating the status of elderly in our society. Now to make concerted action we need data regarding the economic, social, demographic status of aged. So there is a need to launch research in these areas so that effective policies can be implemented. Everyone has to contribute to solve this problem. Scientists, Doctors, family members, government agencies, NGOs, every single man has to contribute because all of us has to cross the path of old age.

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